

C. R. Smith



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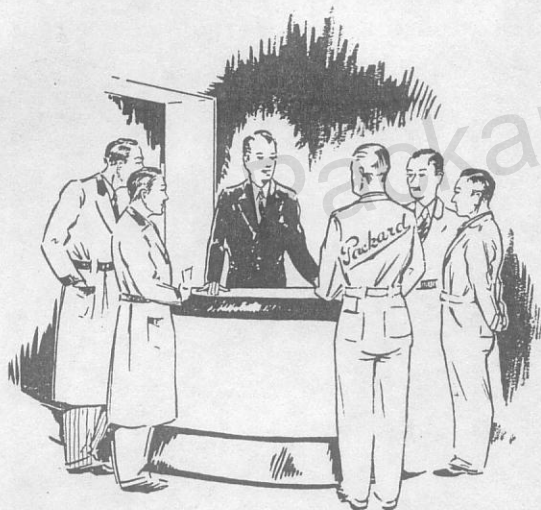


HERE IT IS!



You've been waiting for it and now we have it ready for you—The Packard Master Serviceman's Association. It's a plan that will enable every

qualified Packard serviceman to proudly wear a pin designating him as a Master Serviceman. Question Sheet. Fill in the information on the front cover, check the Question Sheet according to instructions and mail it direct to the factory unless your service manager asks to have it delivered to his desk. This Question Sheet is to be in by November 1. The second and third Question Sheets will follow at four to five week intervals.



qualified Packard serviceman to proudly wear a pin designating him as a Master Serviceman.

It's a simple plan and calls first, for the filling in of an enrollment card like the one shown. Ask your service manager for one, sign it and hand it back to him. Every man who works in an authorized Packard Service Station is eligible.

Your service manager signs and sends the enrollment card to the distributor's service manager, who in turn sends it in to the factory. Upon receipt of this, a set of 1940 Preliminary Shop Manuals will be sent to you along with the first

PACKARD MASTER SERVICEMAN'S

Enrollment Card

I hereby pledge myself to attend all Service Meetings, conscientiously study the Film Supplements, Service Letter, and Shop Manual and to answer all examinations to the best of my ability.

DEALER SERVICE MANAGER

SIGNED

DEALER FIRM NAME AND CITY

DISTRIBUTOR SERVICE MANAGER

DATE

An average grade of 85% is required to make you eligible to wear the Packard Master Serviceman's Pin.

Get your enrollment card in quick. Get your first Question Sheet in on time. Let's go, let's all be Packard Master Servicemen.

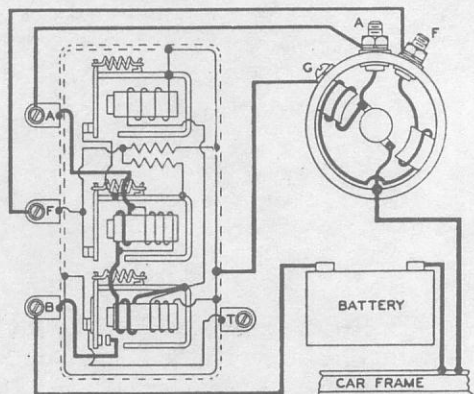


GENERATORS AND REGULATORS

18th Series

GENERATORS

All models of the Eighteenth Series cars are now equipped with two pole shunt wound generators of the same general type used on the Sixteenth and Seventeenth Series Super Eights and Twelves. This new generator reaches its maximum output at a very low speed and maintains a constant output throughout the higher speed ranges without the "taper-off" characteristic of third brush generators.



Internal Wiring VRP-4003A Generator Regulator

In the third brush type of generator formerly used, the position of the third brush controls the current output of the generator. The shunt wound generator has no built-in limiting control and depends upon the external current and voltage regulator to limit the output and prevent it increasing to a point where it would burn out the armature or field coils.

CAUTION: Two pole, shunt wound generators depend upon the dash mounted regulator for current and voltage control. If operated with this control disconnected the armature may be burned out. Because of this danger, do not run the generator on open circuit at speeds above 1500 r.p.m. or for more than a few minutes on open circuit at any speed.

An open or partially open circuit may be created by a loose or disconnected terminal at any of the following points:

1. Generator "A" terminal.
2. Regulator "A" terminal.
3. Regulator "B" terminal.
4. Ammeter terminal of Regulator "B" conn.

The generator "F" terminal, being loose or disconnected either at the generator or regulator, will prevent the generator charging. A loose or disconnected generator "G" terminal will not affect the operation if both generator and regulator are well grounded.

GENERATOR TEST DATA

The operation of the generators and regulators and the service tests and adjustments of them are the same as for the Eighteenth Series Super Eights, except for changes in test specifications due to the increased output of the generator.

The Auto-Lite GEA 4801A generator used on the 1800 and 1801 has the same test specifications as the GEA 4802A used on the 1803-4-5-6-7-8, as follows:

Maximum output, hot, 35 amp. at 8 volts.

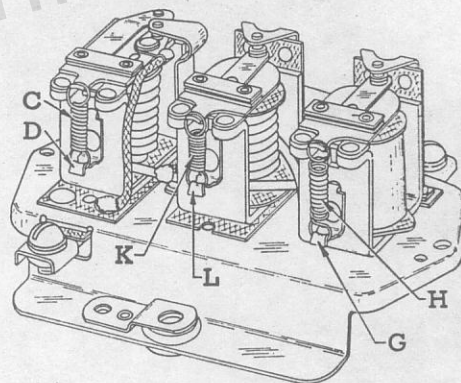
Brush spring tension, 42-53 oz.

Field current, 1.57 to 1.75 amp. at 6 volts.

Motoring free, 4.45 to 4.9 amp. at 6 volts.

REGULATORS

The Auto-Lite VRP 4002A regulator used on the 1800 and 1801 is the same as the VRP 4003A regulator used on the 1803-4-5-6-7-8, except that the latter has an extra set of contact points which provides the ground to the instrument board starter switch through the terminal "T." These points are arranged so that they are opened when the cut-out relay closes, thus opening the circuit to the starter switch and preventing the operation of the starter while the engine is running at speeds above the cut-in point of the generator.



Spring Hanger "D" Controls Cut-Out Voltage
Hanger "L" Controls Generator Amperage
and Hanger "G" Charging Voltage

The current and voltage regulator units are adjusted to maintain the current output and voltage within specified limits by automatically inserting and removing a resistance in the generator field. This automatically adjusts the generator output to the correct value as required by the connected electrical load and condition of charge of the battery. The regulator automatically reduces the charge rate of the generator as the battery becomes charged. This will cause the battery charge indicator on the instrument board to be nearly at zero when the battery is fully charged.

CHARGE INDICATOR

The charge indicator registering zero is not an indication that the generator is not charging properly but is a normal condition when the battery is fully charged. To determine if the generator is charging the battery must first be partially discharged. This may be done by cranking the engine with the starter for twenty or thirty seconds with the ignition shut off. Then start the engine and run it at a speed equivalent to 30 miles per hour. If the indicator hand moves to the charge side, the generator is charging.

QUICK CHECK

In cases of suspected generator or regulator trouble, a quick check to determine whether the generator or regulator is at fault may be made without instruments. First, make sure that the regulator is properly grounded to the dash, then, by means of a jumper lead or short piece of wire, ground the "F" terminal temporarily. Now run the engine at a speed equivalent to approximately 20 miles per hour and observe the charge indicator on the dash. If the indicator shows charge, the fault is probably in the regulator. If the indicator does not show charge, remove the lead from the regulator "A" terminal and, with the engine running as before and the "F" terminal still grounded, strike the lead against a ground. If a spark occurs, the cut-out relay is at fault. If no spark occurs, the generator is at fault.

Adjustment of the VRP 4002A and VRP 4003A regulator used on the Eighteenth Series cars is the same as shown for the 1939 Super Eight unit VRB 4012A on page 95 of the 1938-39 Shop Manual except that the specifications shown below should be followed.

Voltage unit armature air gap .048" to .052".

Operating voltage 7.36 to 7.66 volts.

Current unit armature air gap .034" to .038".

Operating amperage 34 to 36.

Cut-out points open at 6 amps. max. discharge.

TORQUE ARM

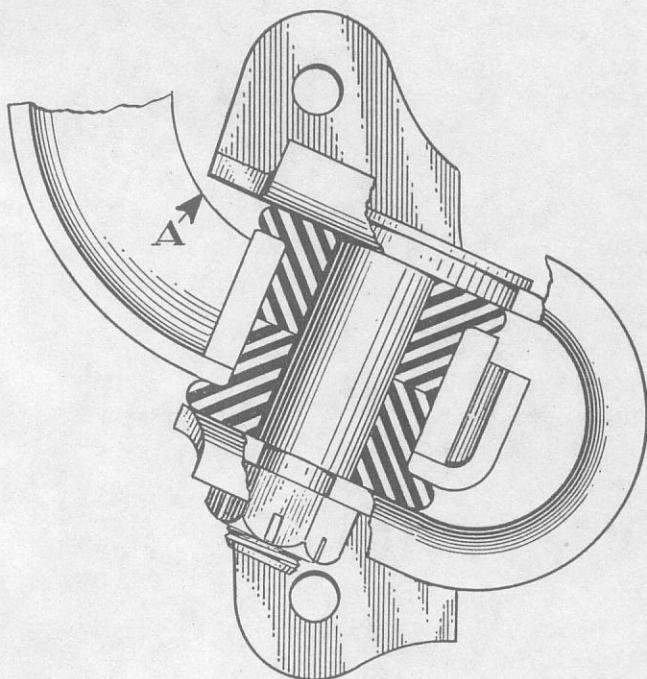
1800-1-3-6

If you have cars with a squeak or rattle in the front suspension, check to see that there is clearance at "A" between the rear of the torque arm and the bracket throughout the full arc of torque arm travel and that the nut is drawn up tight.

If the torque arm should be found to interfere with the bracket, it should be filed or ground until $\frac{1}{8}$ " clearance is provided.

When reinstalling the torque arm pull the nut up until the bracket bottoms on the shoulder of

the bolt, and tighten the nut securely to be sure that it is locked.



The sides of the bracket must be parallel. If they are not, straighten them before assembling the torque arm. Nonparallel bracket sides put an uneven compression on the rubber bushings and cause them to wear rapidly.

WATER PUMP SHAFT

1600-1-2

Please refer to the article under this title in the August 15 issue of the Service Letter.

It has been found that because of wear in the bore of the water pump case the Seventeenth Series shaft and bearing assembly is not enough of a press fit to hold the bearing in place in the Sixteenth Series water pump case without the use of a locating screw.

To permit locating the bearing we have developed a set screw with a round nose that seats in the groove on the outside of the bearing. The new set screw is installed in the tapped hole from which the original locating screw was removed.

The new set screws are carried by the Service Stores Division under piece number 351882. It is necessary that they be ordered separately under the above number.

Service Letters are available for everyone connected with Packard Service Stations. If service managers are not receiving a sufficient number of copies, they should write the Editor and give the extra number needed.

GO AFTER IT!

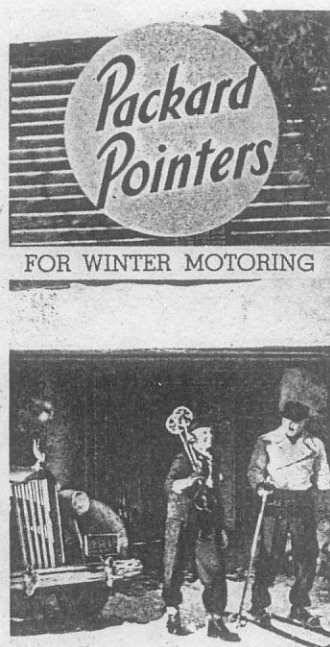
If business isn't any too spry, how about a little extra effort to bring some in?

We have some winter folders that can be imprinted with your name and prices. They are attractive in blue and brown and fit a No. 10 regular business size envelope.

Try them out. You will be surprised at the business they bring in. The cost is low—the first hundred imprinted is \$1.80. Additional hundreds are \$1.15 each. See General Letter 357.

If you prefer a post card that will bring them in for a winter check-up, try this one, available in two colors. It is supplied on government stamped post card stock. Imprinted with your firm name, the price is \$2.05 for the first hundred and \$1.40 for additional hundreds.

If you wish to have your own "special" on the folder or card add to total order 10c a line for each line changed.



*Just
around
the corner*

Winter preparation for your Packard isn't as big a job as it used to be but it's just as important.

CLEAN AND ADJUST CARBURETOR
CLEAN AND ADJUST DISTRIBUTOR AND PLUGS
ADJUST VALVES
TIGHTEN CYLINDER HEAD
SET IGNITION TIMING

Our Special Price \$0.00

JONESVILLE PACKARD CO.

Jonesville, Michigan
Phone 0642

26

PACKARD OWNERS ARE BEST SERVED BY PACKARD

This is one of a series of service business-getting stamped post cards. The balance of the set is illustrated in "The First Step in Making Service Profitable."

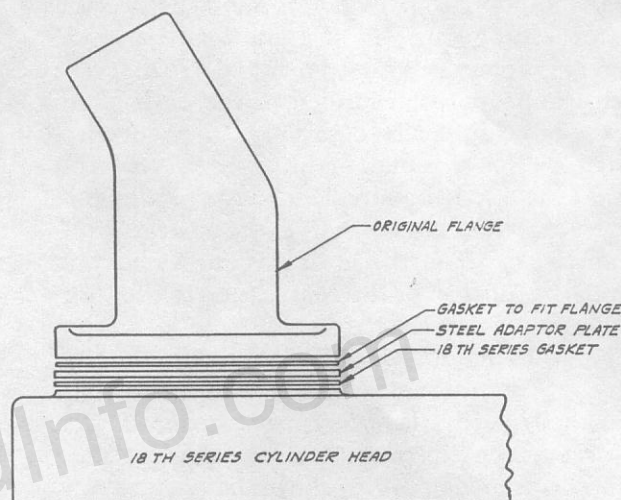
CYLINDER HEADS

120-120B-120C-115C

In order to simplify ordering and stocking cylinder heads shipped from the Service Stores Division, we make a practice of using the current model production head wherever possible.

At present, we are shipping 18th series heads for all Junior model cars. Heads shipped on order for 120-120B are tapped for 14 mm. spark plugs. All others are tapped for 10 mm.

These heads are shipped without water outlet flanges. An adapter plate and two gaskets are



shipped with each head to permit the use of the original outlet flange when the head is used on engines previous to the 18th series.

BONNET LOUVRE MEDALLION BACK ORDERS

We regret that our Service Parts Division has been unable to fill all parts orders for Bonnet Louvre Panels Front (Medallion), as announced in General Letter G-351 and Service Letter Vol. 13, No. 18, Sept. 15, 1939.

Our vendor has been unable to deliver these to us in sufficient quantities to take care of our service and production requirements. The difficulties are being corrected and if you do not receive those which you order as promptly as you expect them, we ask that you please be patient with us a little while longer.

SUGGESTIONS OR QUESTIONS ARE ALWAYS WELCOME. ADDRESS—N. A. LULL—EDITOR PACKARD SERVICE LETTER